

## NUMBER 9 (Continued)

SEPTEMBER 1969

Systematic Errors in Operational Baroclinic Prognoses at the National Meteorological Center.....	E. B. Fawcett	670-682
Picture of the Month—Alaskan Forest Fires.....	Frances C. Parmenter	683
The Weather and Circulation of June 1969—A Predominantly Cool and Wet Month.....	A. James Wagner	684-690

## NUMBER 10

OCTOBER 1969

## Evapotranspiration Climatology:

I. A New Approach to Numerical Prediction of Monthly Evapotranspiration, Runoff, and Soil Moisture Storage.....	H. Lettau	691-699
Long-Term Variations in Equatorial Circulation and Rainfall.....	A. F. Krueger and T. I. Gray, Jr.	700-711
On the Question of Measuring the Vertical Temperature Distribution of the Atmosphere From Satellites.....	Sigmund Fritz	712-715
Correction Notice.....		715
Some Remarks on African Disturbances and Their Progress Over the Tropical Atlantic.....	Toby N. Carlson	716-726

## Weather Note:

A Mesoscale Cold Front in New England.....	Frederick Sanders	727-729
Picture of the Month—Early Summer Tornado Situation.....	Frances C. Parmenter	730-731
Correspondence:		

A Reliable Method for the Numerical Integration of a Large Class of Ordinary and Partial Differential Equations

R. S. Lindzen and H.-L. Kuo 732-734

The Weather and Circulation of July 1969—A Predominantly Wet Month, Cool in the North and Warm in the South

James F. Andrews 735-738

New ESSA Publication.....

738

## NUMBER 11

NOVEMBER 1969

## Climate and the Ocean Circulation:

I. The Atmospheric Circulation and the Hydrology of the Earth's Surface.....	Syukuro Manabe	739-774
II. The Atmospheric Circulation and the Effect of Heat Transfer by Ocean Currents.....	Syukuro Manabe	775-805
III. The Ocean Model.....	Kirk Bryan	806-827
Picture of the Month—Hurricane Camille.....	Frances C. Parmenter	828-829
The Weather and Circulation of August 1969—A Month With Record Warmth in the West.....	Robert R. Dickson	830-834

## NUMBER 12

DECEMBER 1969

Numerical Studies of Effects of Surface Friction on Large-Scale Atmospheric Motions.....	Maurice B. Danard	835-844
Effect of a Sudden Change in Terrain Height on the Three-Dimensional Low-Level Air Flow, as Estimated From Tetron		
Flights.....	W. H. Hoecker and J. K. Angell	845-849
Flow Over a Localized Heat Source.....	M. A. Estoque and C. M. Bhumralkar	850-859
Surface Heat Budget of the Pampa de La Joya, Peru.....	Charles R. Stearns	860-866
Quasi-Biennial Variations in the "Centers of Action".....	J. K. Angell, J. Korshover, and G. F. Cotten	867-872
Picture of the Month—Convective Clouds Along the Jet Stream.....	Frances C. Parmenter	873-874
On Anomalous Dark Patches in Satellite-Viewed Sunlight Areas.....	E. Paul McClain and Alan E. Strong	875-884
Numerical Integration of Fluid Flow Over Triangular Grids.....	David Williamson	885-895
Note on the Accumulated Error in the Numerical Integration of a Simple Forecast Model.....	Walter James Koss	896-901
Note on Estimation of Vertical Motion by the Omega Equation.....	Dusan Djurić	902-904
Satellite Evidence of Sea-Air Interactions During the Indian Monsoon.....	K. Raghavan	905-908
Selected Publications by ESSA Authors.....		909
The Weather and Circulation of September 1969—Persistence of the August Regime in the United States.....	Julian W. Posey	910-915
Contents, Volume 97.....		916-918
Correction Notices.....		918
Index, Volume 97.....		919-925

## CORRECTION NOTICES

Vol. 96, No. 1, Jan. 1968: p. 26, 2d paragraph, 3d line from bottom, F is to be read instead of E, and G instead of F; p. 28, 3d line after equation (4),  $\bar{u}_z$  instead of  $u_z$ , and 10th line after equation (4), release instead of reaseel; p. 30, fig. 11 caption,  $[\bar{u}][\bar{v}]$  instead of  $[u][v]$ .  
 Vol. 96, No. 5, May 1968: pp. 271-272, equations (18), (19), and (20) should read

$$U_* = \frac{kU(\Delta z + h\lambda)}{\frac{\Delta z}{h+z_0} \cdot \phi_M\left(\frac{h}{L}\right) + \int_0^h \frac{\phi_M\left(\frac{z}{L}\right)}{z+z_0} dz} dz \quad (18), \quad \theta_* = \frac{k[\theta(\Delta z + h) - \theta_0]}{\frac{\Delta z}{h+z_0} \cdot \phi_H\left(\frac{h}{L}\right) + \int_0^h \frac{\phi_H\left(\frac{z}{L}\right)}{z+z_0} dz} \quad (19), \quad \text{and} \quad q_* = \frac{k[q(\Delta z + h) - q_0]}{\frac{\Delta z}{h+z_0} \cdot \phi_q\left(\frac{h}{L}\right) + \int_0^h \frac{\phi_q\left(\frac{z}{L}\right)}{z+z_0} dz} \quad (20);$$

also p. 272, add the following paragraph just above "GROUND TEMPERATURE": The values of  $K_M$ ,  $K_H$ , and  $K_q$  obtained from the formulation of Estoque [3] when  $0 \geq R_i \geq 0.2$  and the formulations explained above in respect of the other ranges of  $R_i$  are assigned to the level  $z=h$ . A linear fall of this value to  $1/10$ th at  $H=2050$  m is assumed.

Vol. 96, No. 10, Oct. 1968: p. 736, caption of figure 1(a) and 1(b), "absorption" should be replaced by "slab absorptivity" and add "The absorptivity of a slab is computed from the absorptivity of a column by using the following formula,  $a_f(u) = a_c(1.66u)$ , where  $a_f$  and  $a_c$  are the absorptivities of slab and column, respectively, and  $u$  is optical thickness at STP," ordinate ( $a_f$ ), abscissa ( $\log u$ ); p. 739, legend of figure 8, symbols for plotting (M-S) and (R-W)<sub>2</sub> should be interchanged.

Vol. 97, No. 1, Jan. 1969: p. 84, 4th line after equation (20) should read "initial state, equation (19) is thus . . . ."

Vol. 97, No. 3, Mar. 1969: p. 286, next to the last sentence, "Moscow Airport in Idaho reported  $-50^\circ\text{F}$ , on the 30th, the coldest December temperature of record in the State." is incorrect and should be deleted.